



## Parasitological Survey of European Hedgehogs (*Erinaceus europaeus*) from Romania

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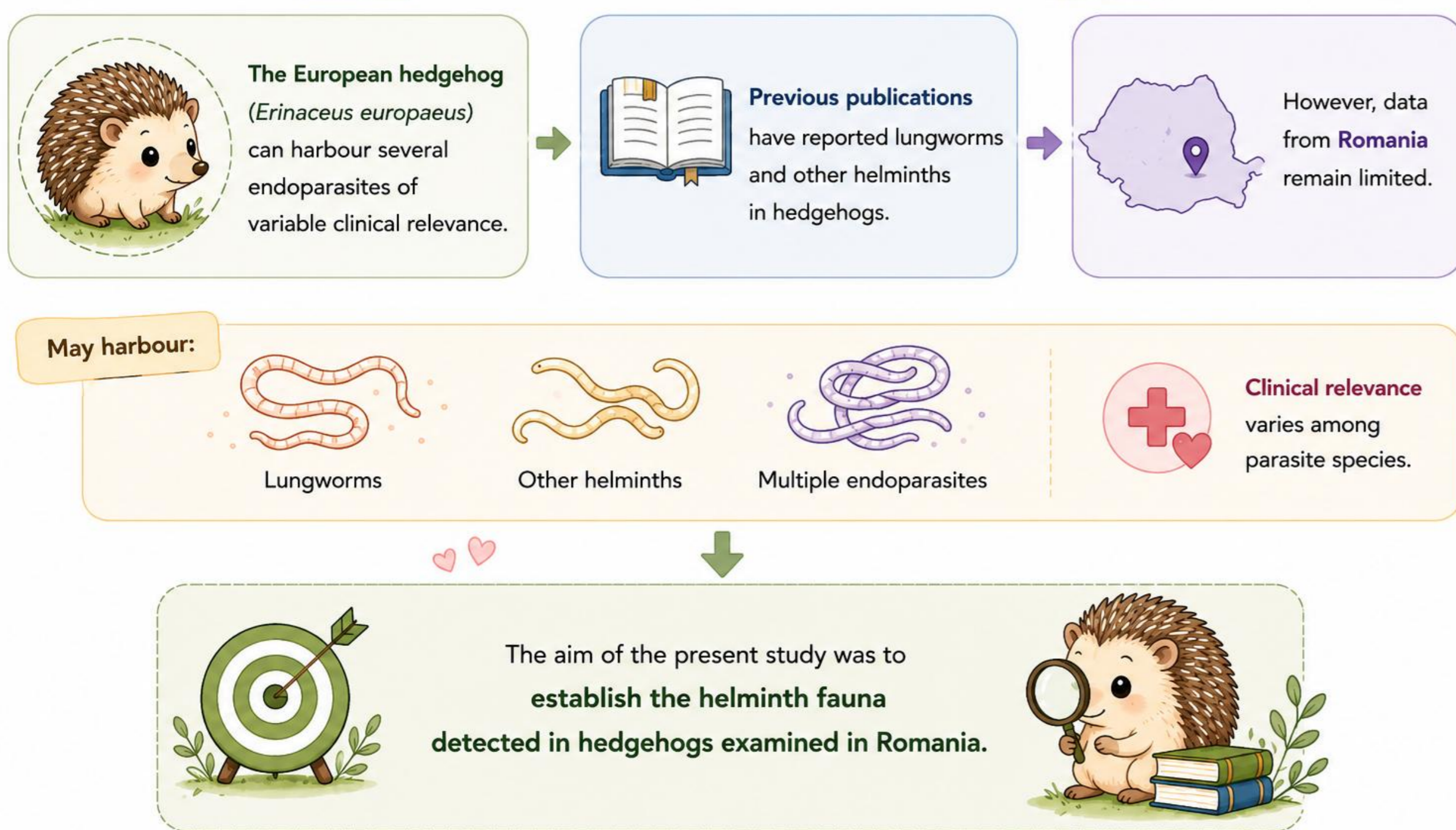
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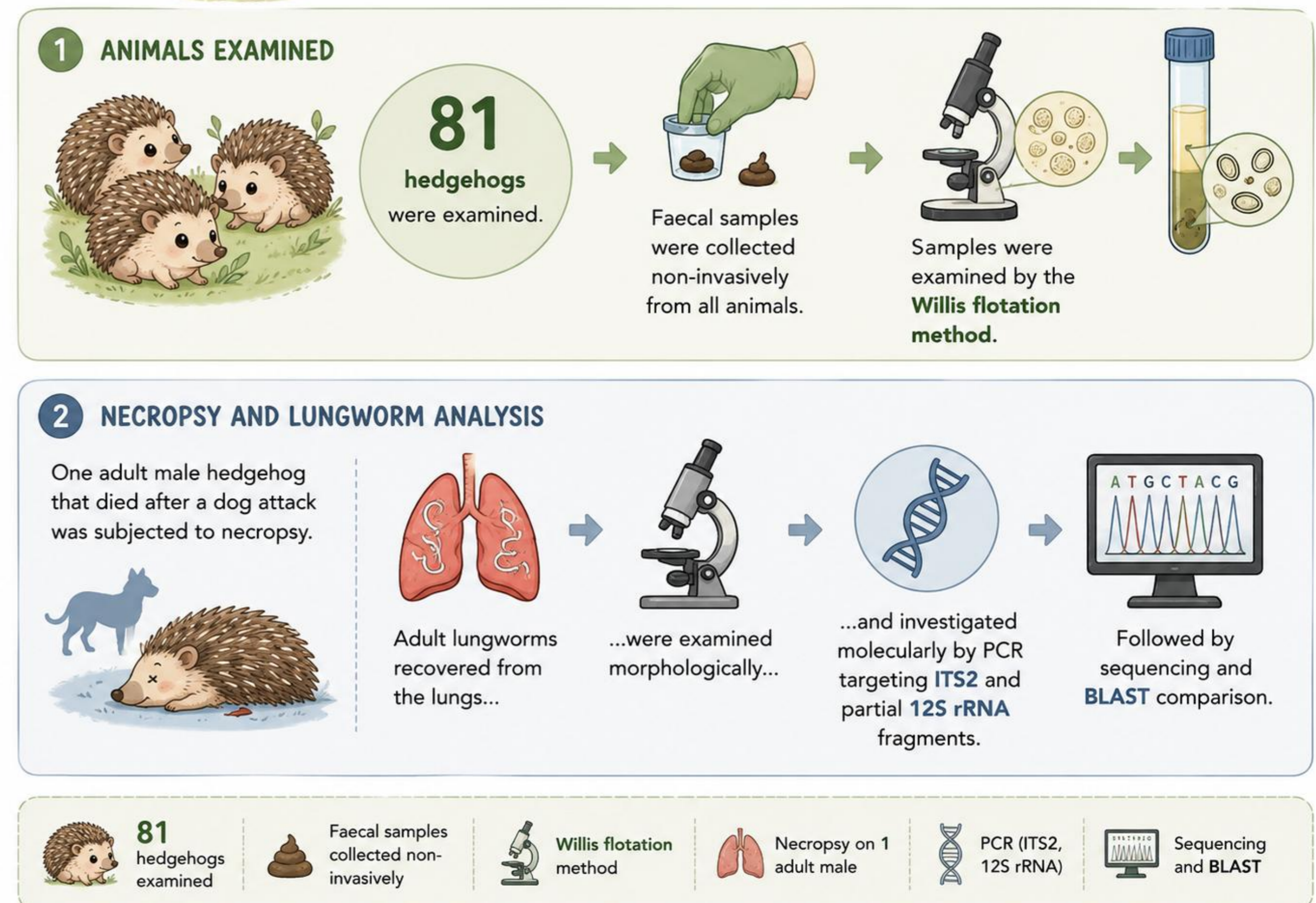
**Abstract:** The European hedgehog (*Erinaceus europaeus*) is a common wild mammal frequently admitted to wildlife rehabilitation centres, where parasitic infections may influence health status, recovery and post-release survival. This study aimed to investigate endoparasites and ectoparasites in European hedgehogs from Romania, with emphasis on helminth infections and molecular confirmation of lungworms. A total of 81 European hedgehogs originating from Brașov and several other Romanian counties were examined. Faecal samples were collected non-invasively and analysed using the Willis flotation method. In addition, one deceased adult male hedgehog was subjected to necropsy. Adult lungworms recovered from pulmonary tissue were examined morphologically and by PCR amplification targeting ITS2 and partial 12S rRNA regions, followed by sequencing and BLAST comparison. Overall, 36 of the 81 examined hedgehogs were positive for parasitic elements, corresponding to a prevalence of 44.44%. The identified parasites included *Capillaria* spp. in 20 hedgehogs (24.69%), strongylid-type eggs in 15 hedgehogs (18.52%), *Physaloptera* spp. in four hedgehogs (4.94%) and ixodid ticks in seven orphaned juveniles (8.64%). Mixed infections were also recorded, mainly involving *Capillaria* spp. associated with *Strongylidae* spp. or *Physaloptera* spp. Necropsy revealed numerous adult lungworms in the pulmonary tissue, associated with pulmonary congestion and mild dilation of the right heart. Morphological examination assigned the lungworms to *Crenosoma* spp., while molecular analysis confirmed the species as *Crenosoma striatum*. These findings show that parasitic infections, including helminths and ixodid ticks, are frequent in European hedgehogs admitted to rehabilitation or veterinary care in Romania. This represents the first molecular confirmation of *Crenosoma striatum* in European hedgehogs from Romania.

**Keywords:** helminths; ixodid ticks; *Crenosoma striatum*; *Capillaria* spp.; wildlife rehabilitation; molecular diagnosis.

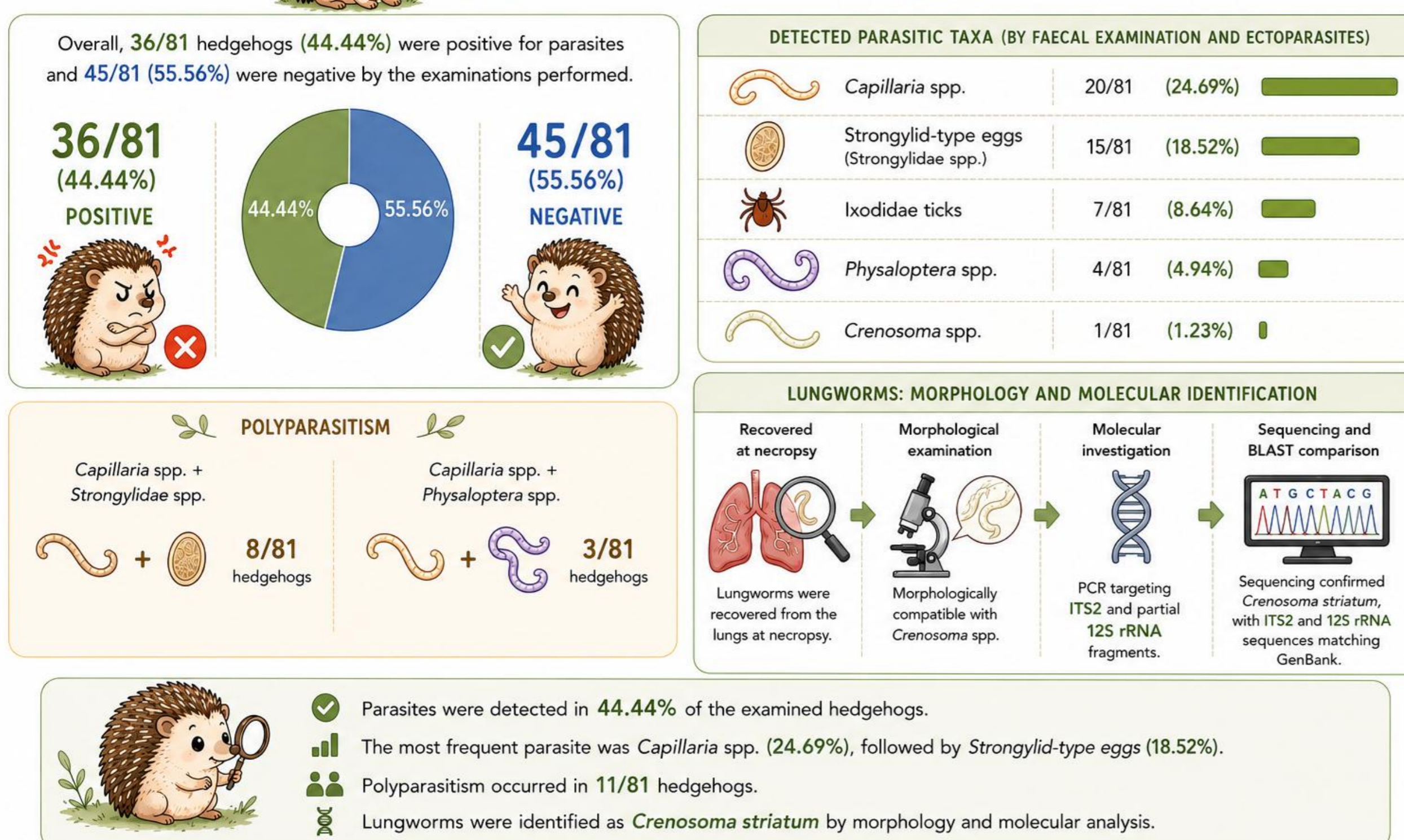
### INTRODUCTION



### METHODS



### RESULTS



### CONCLUSIONS

